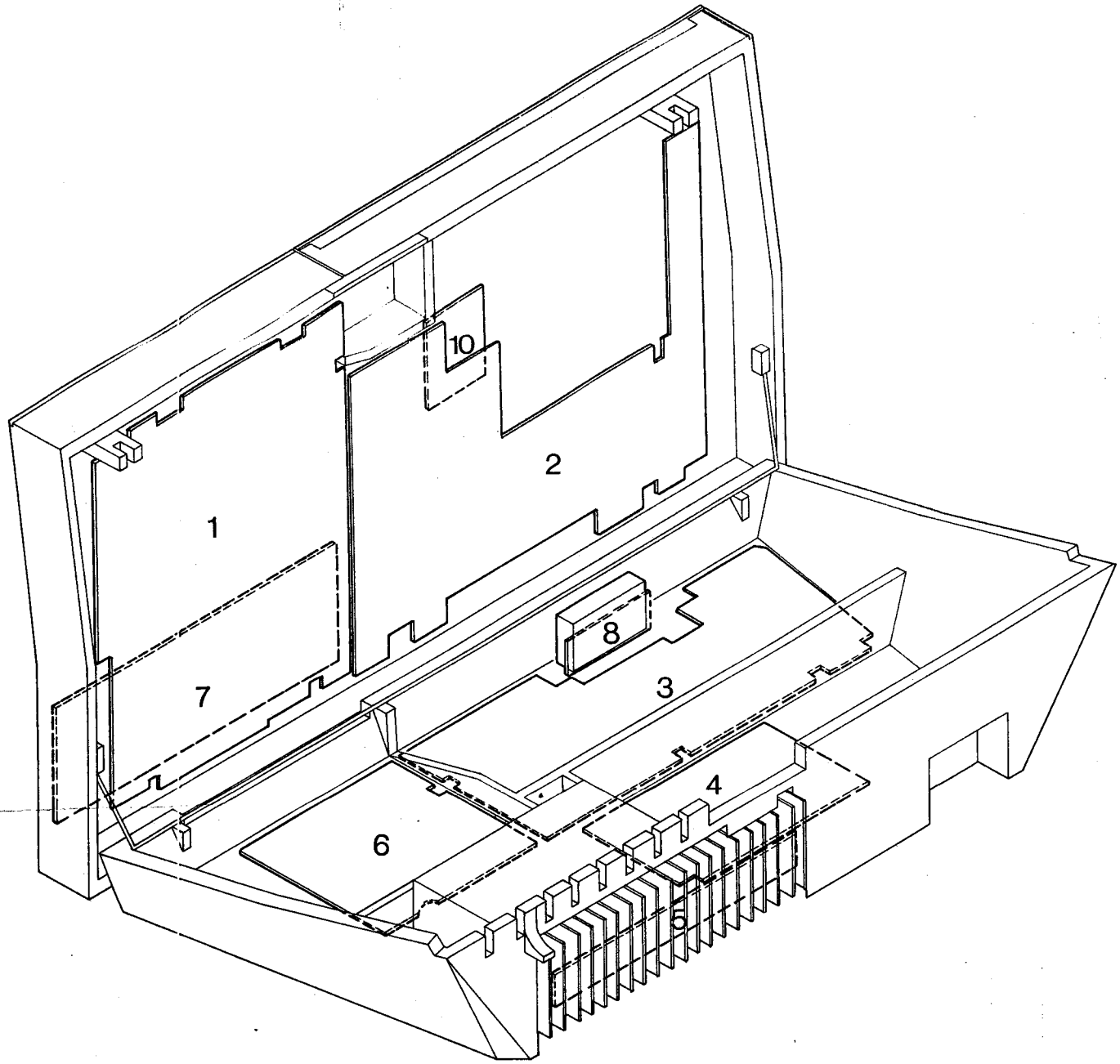
Bang&Olufsen



BEOCORD 8000

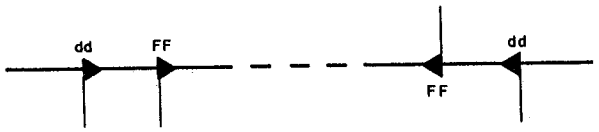
Type 4821, 4822, 4823, 4824, 4825, 4826

01-80 3534161

EXPLANATION TO DIAGRAM

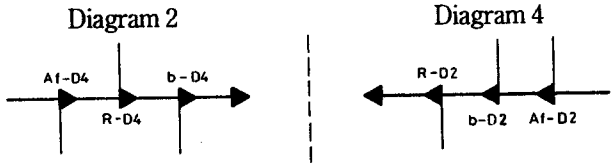
The wire connections have been gathered into »bundles« in the diagram. The individual wire is provided with codes indicating where they lead to.

INTERNAL CONNECTION ON A DIAGRAM PAGE



indicating by two identical letters (capital or small).

CONNECTION TO ANOTHER DIAGRAM PAGE



indicated by a letter (capital or small) and a diagram (D) number or by a small and a capital letter together with a diagram (D) number.

GROUND SYMBOLS

Two different ground symbols are used in the set.

= ground (motors, display, magnet, coils, etc.)

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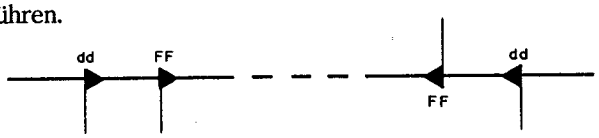
The biggest PC boards are provided with co-ordinate systems. The components on these PC boards are provided with a co-ordinate number on the diagram (smaller printing type than the position numbers) indicating in which co-ordinate they are placed on the PC board.

ERLÄUTERUNGEN ZUM SCHALTBILD

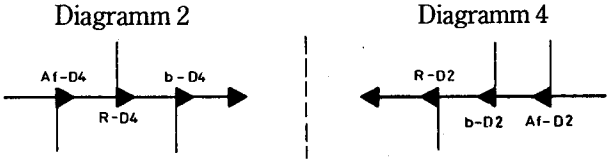
Die Leitungsverbindungen sind im Schaltbild in »Bündeln« gesammelt. Die einzelnen Leitungen sind mit Coden versehen, die angeben, wohin die Leitungen führen.

INTERNE VERBINDUNG AUF EINER SCHALTBILDSEITE



sind mit zwei gleichen Buchstaben (gross oder klein) angegeben.

VERBINDUNG ZU EINER ANDEREN SCHALTBILDSEITE



sind mit einem Buchstaben (gross oder klein) und einem Schaltbild (D) Nummer oder mit einem kleinen und einem grossen Buchstaben zusammen mit einer Schaltbild (D) Nummer angegeben.

MASSE SYMBOLE

Im Gerät werden 2 verschiedene Masse-Symbole verwandt.

= Masse (Motoren, Display, Saugspulen, etc).

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Signal-Spannungen müssen im Verhältnis zu Signal Masse gemessen werden, um ein korrektes Ergebnis zu erhalten.

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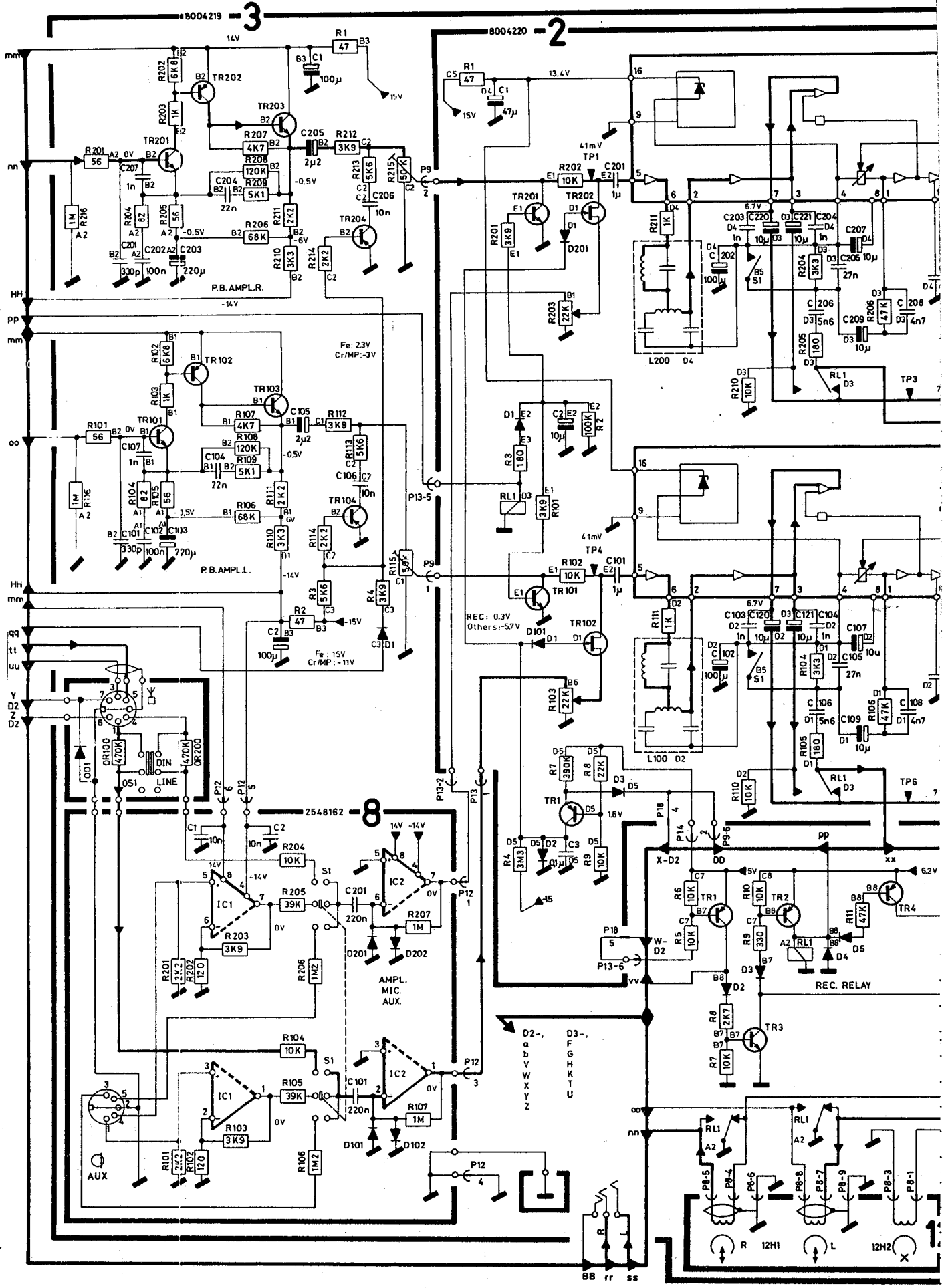
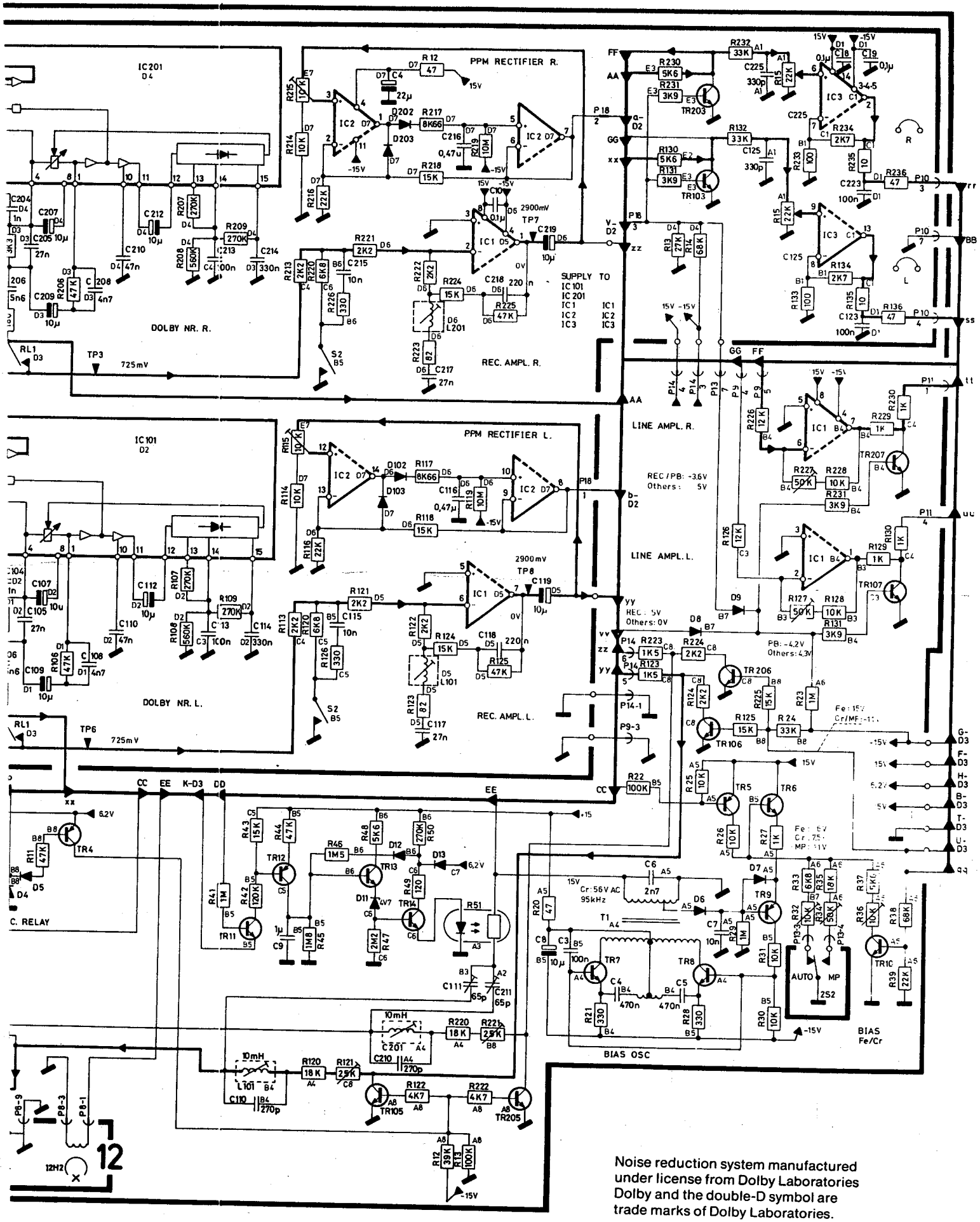
Die grössten Printplatten sind mit einem Koordinatensystem versehen. Die Komponenten auf diesen Printplatten sind im Schaltbild mit einer Koordinatennummer (kleinerem Schrifttyp als der Positionsnummer) versehen, die erklärt in welcher Koordinate auf der Printplatte sie angebracht sind.

Bang&Olufsen

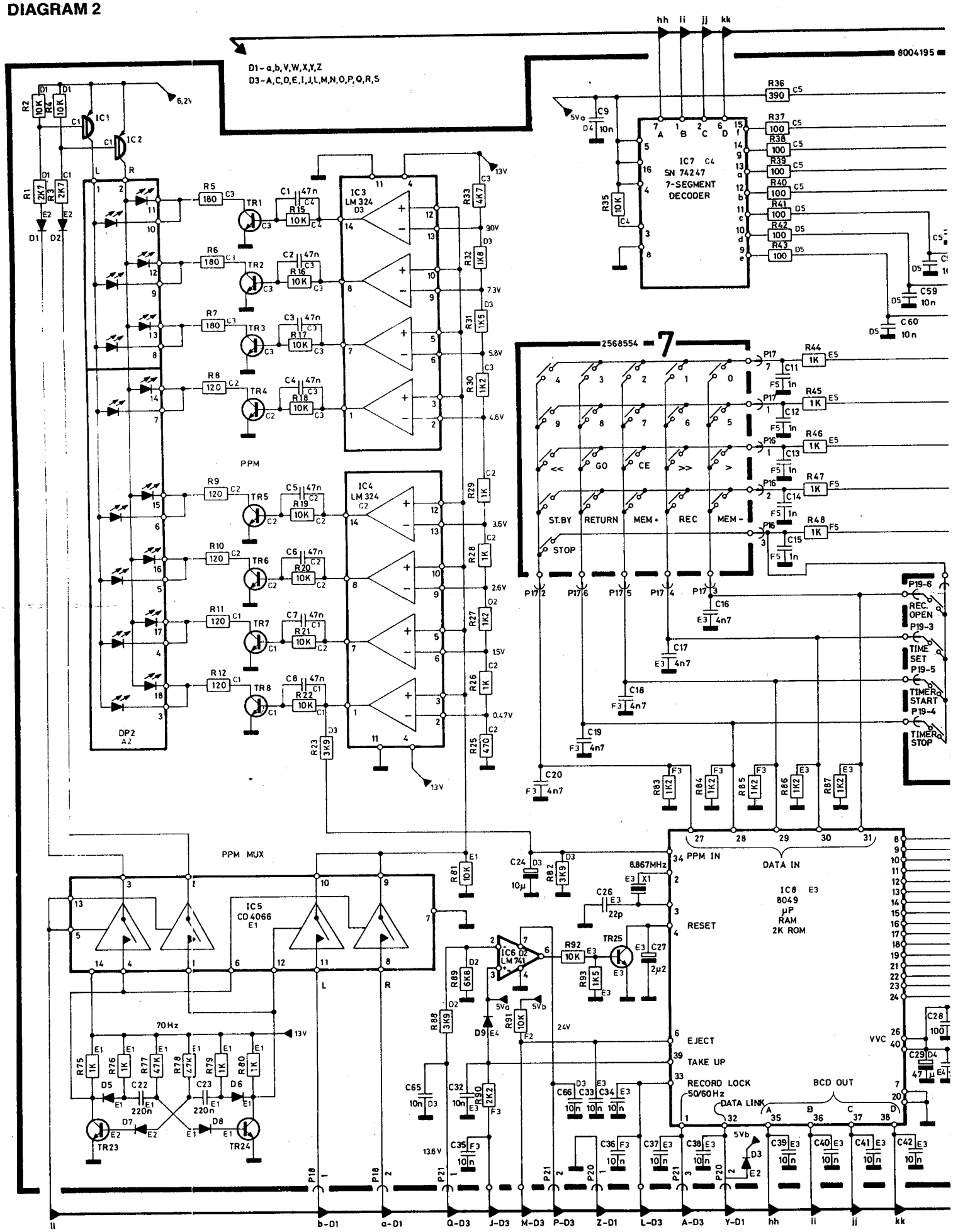
DIAGRAM 1





Noise reduction system manufactured under license from Dolby Laboratories Dolby and the double-D symbol are trade marks of Dolby Laboratories.

DIAGRAM 2


D1 - a,b,V,W,X,Y,Z
D3 - A,C,O,E,I,J,L,M,N,O,P,Q,R,S
8004195
2568554
IC1
IC2
IC3 LM 324
IC4 LM 324
IC5 CD4066
IC6 LM 741
IC7 SN 74247 7-SEGMENT DECODER
IC8 8049 µP RAM 2K ROM
PPM
PPM MUX
DP2
70Hz
8.867MHz
ST.BY
RETURN
MEM+
REC
MEM-
STOP
GO
CE
REC. OPEN
TIME SET
TIMER START
TIMER STOP
PPM IN
DATA IN
RESET
EJECT
TAKE UP
RECORD LOCK
50/60Hz
DATA LINK
BCD OUT
ll
b-D1
a-D1
Q-D3
J-D3
M-D3
P-D3
Z-D1
L-D3
A-D3
Y-D1
hh
ii
jj
kk

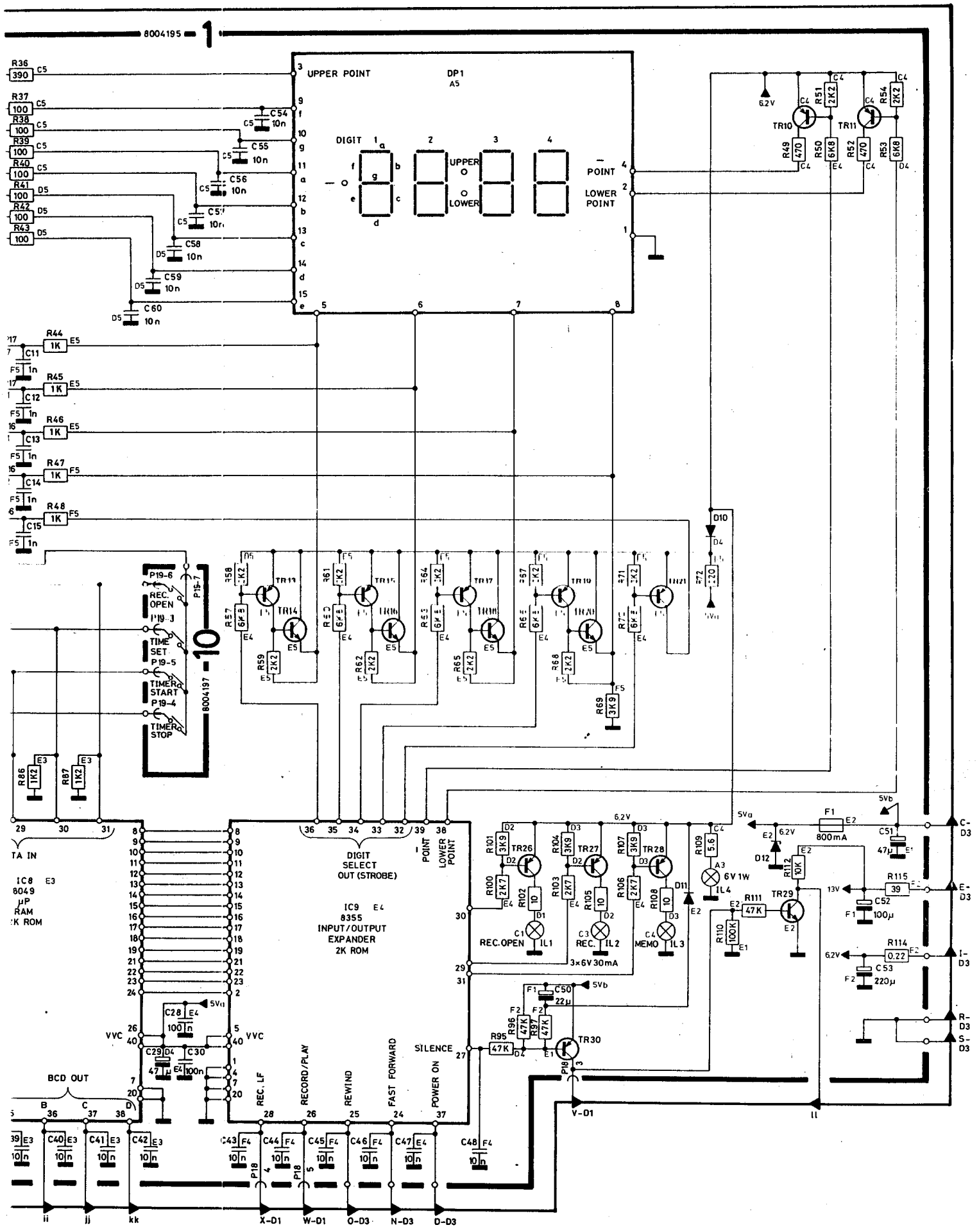

8004195 1
UPPER POINT
DP1
A5
DIGIT
UPPER
LOWER
POINT
LOWER POINT
TR10
TR11
TR12
TR13
TR14
TR15
TR16
TR17
TR18
TR19
TR20
TR21
D10
P19-6
REC. OPEN
P19-3
TIME SET
P19-5
TIMER START
P19-4
TIMER STOP
8004197 10
P15-7
TA IN
IC8 E3
8049
µP
RAM
K ROM
DIGIT SELECT OUT (STROBE)
IC9 E4
8355
INPUT/OUTPUT
EXPANDER
2K ROM
REC.OPEN IL1
REC. IL2
MEMO IL3
3×6V 30mA
6V 1W IL4
TR26
TR27
TR28
TR29
TR30
800mA
F1
C51 47µ
C52 100µ
C53 220µ
C50 22µ
R115 39
R114 0.22
R111 47K
R110 100K
R112 10K
R109 5.6
R95 47K
R96 47K
R97 47K
5Vb
5Va
6.2V
13V
VVC
BCD OUT
SILENCE
REC. LF
RECORD/PLAY
REWIND
FAST FORWARD
POWER ON
C-D3
E-D3
I-D3
R-D3
S-D3
V-D1
X-D1
W-D1
O-D3
N-D3
D-D3

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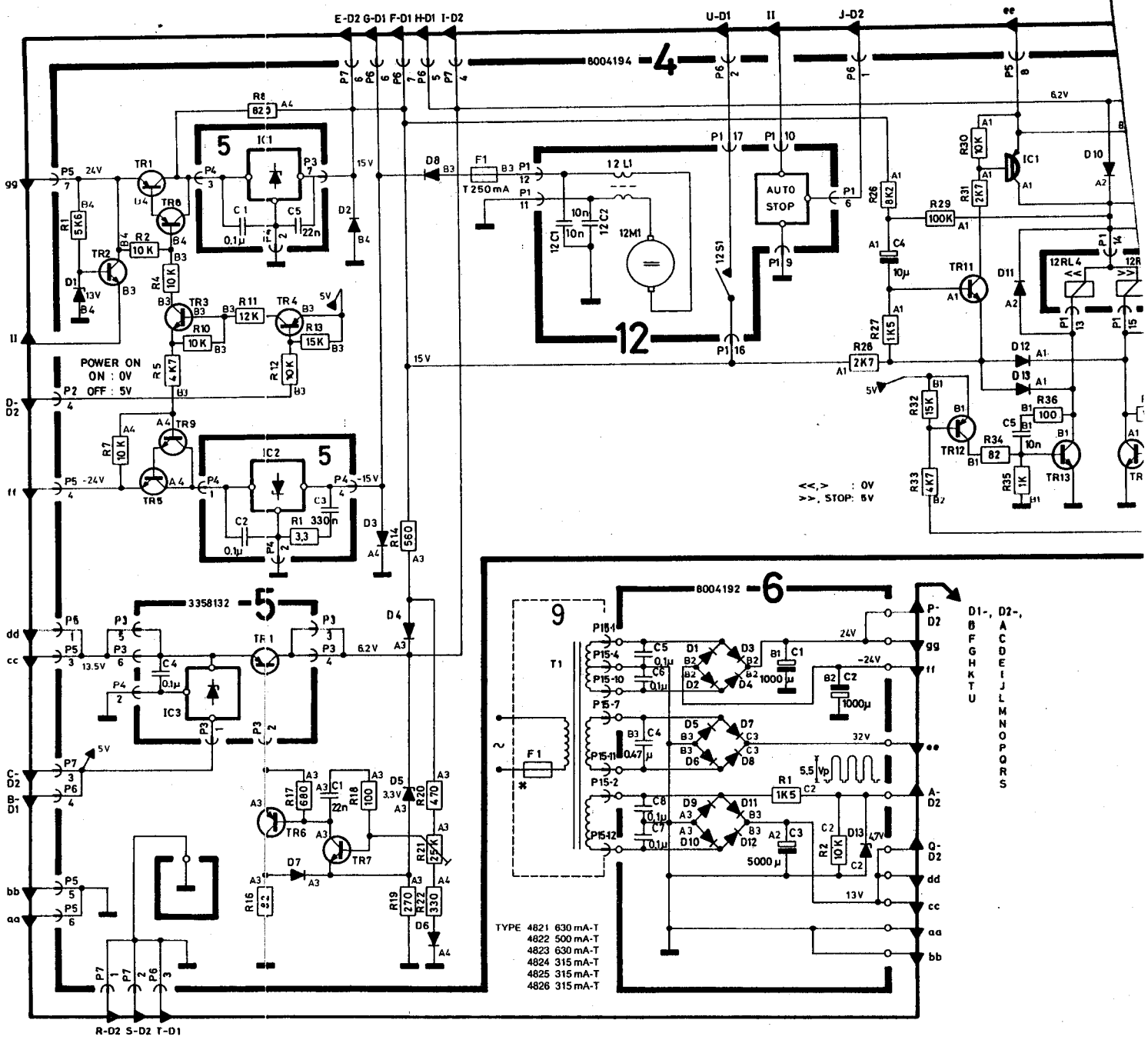
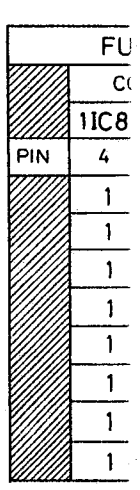
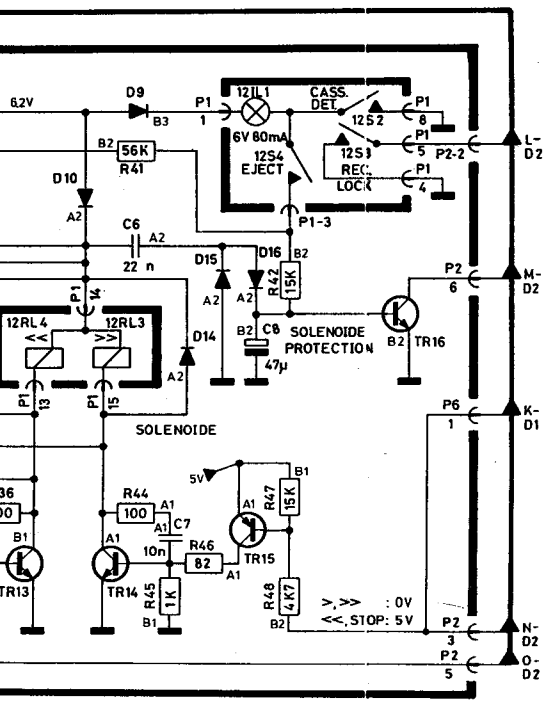
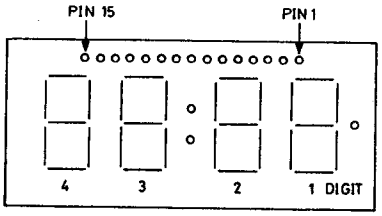
DIAGRAM 3





FUNCTION TABLE DIAGRAM 2





Switches:

12S1 Fe_2O_3 ON, CrO_2 OFF.
12S2 With cass. ON, without OFF.
12S3 Rec. ON, Rec lock OFF.
12S4 Play ON, Press eject OFF.

PIN	ASSIGNMENT (BOTTOM VIEW)
1	COMMON CATHODE (POINTS)
2	LOWER POINT ANODE
3	UPPER POINT ANODE
4	–POINT ANODE
5	DIGIT 1 ANODE
5	DIGIT 2 ANODE
7	DIGIT 3 ANODE
8	DIGIT 4 ANODE
9	SEG. fCATHODE
10	SEG. gCATHODE
11	SEG. aCATHODE
12	SEG. bCATHODE
13	SEG. cCATHODE
14	SEG. dCATHODE
15	SEG. eCATHODE

FUNCTION TABLE FOR MICROCOMPUTER 1IC8-1IC9

	CONDITIONS			FUNCTION	RESULTS							
	1IC8	1IC8	1IC8		1IC 9							
PIN	4	33	6		24	25	26	27	28	37	30	29
	1			STAND BY	1	1	1	0	0	1		
	1	1	1	REC OPEN			1		0	0	0	1
	1	1	1	RECORD	0	0	0	1	1	0	0	0
	1			STOP	1	1	1	0	0	0		1
	1		1	≫	0	1	1	0	0	0		1
	1		1	≪	1	0	1	0	0	0		1
	1		1	>	0	0	1	1	0	0		1
	1	1	1	REC PAUSE	1	1	0	1	1	0	0	1/0

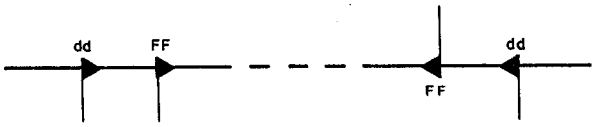
FUNCTION TABLE 1IC7 (SN74247)

DECIMAL ON DISPLAY	INPUTS				OUTPUTS						
	D	C	B	A	a	b	c	d	e	f	g
0	0	0	0	0	0	0	0	0	0	0	1
1	0	0	0	1	1	0	0	1	1	1	1
2	0	0	1	0	0	0	1	0	0	1	0
3	0	0	1	1	0	0	0	0	1	1	0
4	0	1	0	0	1	0	0	1	1	0	0
5	0	1	0	1	0	1	0	0	1	0	0
6	0	1	1	0	0	1	0	0	0	0	0
7	0	1	1	1	0	0	0	1	1	1	1
8	1	0	0	0	0	0	0	0	0	0	0
9	1	0	0	1	0	0	0	0	1	0	0
⊐	1	0	1	1	1	1	0	0	1	1	0
⊏	1	0	1	0	1	1	1	0	0	1	0
⊔	1	1	0	0	1	0	1	1	1	0	0
⊑	1	1	0	1	0	1	1	0	1	0	0

EXPLANATION TO DIAGRAM

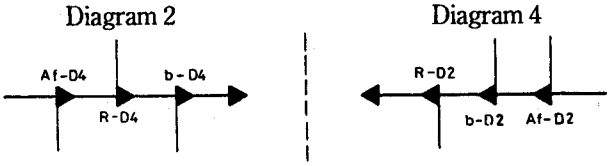
The wire connections have been gathered into »bundles« in the diagram. The individual wire is provided with codes indicating where they lead to.

INTERNAL CONNECTION ON A DIAGRAM PAGE



indicating by two identical letters (capital or small).

CONNECTION TO ANOTHER DIAGRAM PAGE



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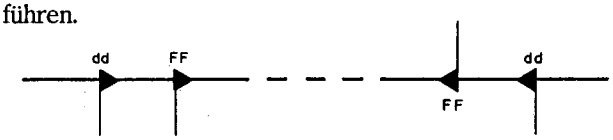

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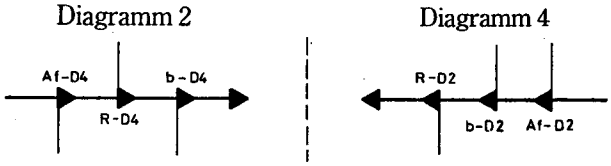

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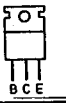
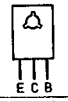
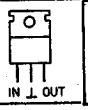
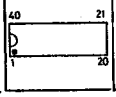
LIST OF TRANSISTORS AND IC's

19	20	24	31	32	101	102	103
							

105	123	124
		

1TR1	8320097	**20**	BC 547 B
1TR2			
1TR3			
1TR4			
1TR5			
1TR6			
1TR7			
1TR8			
1TR10	8320152	**20**	BC 557 B
1TR11			
1TR13			
1TR14	8320329	**20**	BC 338-25/18
1TR15	8320152	**20**	BC 557 B
1TR16	8320329	**20**	BC 338-25/18
1TR17	8320152	**20**	BC 547 B
1TR18	8320329	**20**	BC 338-25/18
1TR19	8320152	**20**	BC 557 B
1TR20	8320329	**20**	BC 338-25/18
1TR21	8320152	**20**	BC 557 B
1TR23	8320097	**20**	BC 547 B
1TR24			
1TR25			
1TR26	8320152	**20**	BC 557 B
1TR27			
1TR28			
1TR29	8320097	**20**	BC 547 B
1TR30	8320152	**20**	BC 557 B
1IC1	8340025	**19**	MPS A65
1IC2		**19**	SPS 5431
1IC3	8340157	**102**	LM 324
1IC4			
1IC5	8340209	**102**	CD 4016
		102	HEF 4016
		102	MC 4016
1IC6	8340141	**103**	LM 741 CN
1IC7	8340156	**101**	SN 74247 N
1IC8	8340158	**124**	µP 8049
1IC9	8340159	**124**	EXP. 8355
2TR1	8320152	**20**	BC 557 B
2TR101/201	8320097	**20**	BC 547 B
2TR102/202	8320396	**24**	2 N 5639
		24	MPF 4302
2TR103/203	8320097	**20**	BC 547 B
2IC1	8340195	**103**	LF 353 BN
2IC2	8340205	**102**	LF 347 N
		102	TL 084 CN
2IC3	8340232	**102**	LM 378
2IC101/201	8340183	**101**	LM 1011 AN
3TR1	8320152	**20**	BC 557 B
3TR2	8320331	**20**	BC 328-25/18
3TR3	8320097	**20**	BC 547 B
3TR4	8320152	**20**	BC 557 B
3TR5			
3TR6	8320097	**20**	BC 547 B
3TR7	8320237	**20**	BC 546 B
3TR8			
3TR9	8320152	**20**	BC 557 B

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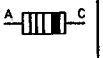
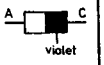
3TR10	8320097	**20**	BC 547 B
3TR11			
3TR12	8320152	**20**	BC 557 B
3TR13	8320097	**20**	BC 547 B
3TR14			
3TR101/201	8320344	**20**	BC 550 B
3TR102/202	8320069	**20**	BC 559 B
3TR103/203	8320097	**20**	BC 547 B
3TR104/204	8320152	**20**	BC 557 B
3TR105/205	8320366	**19**	NPS A 16
3TR106/206			
3TR107/207	8320097	**20**	BC 547 B
3IC1	8340048	**103**	MC 1458CP1
4TR1	8320428	**32**	BD 438
4TR2	8320097	**20**	BC 547B
4TR3	8320321	**19**	MPS A 06
4TR4	8320152	**20**	BC 557 B
4TR5	8320427	**32**	BD 437
4TR6	8320152	**20**	BC 557 B
4TR7	8320097	**20**	BC 547 B
4TR8	8320152	**20**	BC 557 B
4TR9	8320097	**20**	BC 547 B
4TR11	8320321	**19**	MPS A 06
4TR12	8320331	**20**	BC 328-25/18
4TR13	8320441	**32**	BD 439
4TR14			
4TR15	8320331	**20**	BC 328-25/18
4TR16	8320097	**20**	BC 547 B
4IC1	8340207	**32**	BD 678
5TR1	8320369	**31**	BP 534
5IC1	8340208	**105**	UA 78 M 15
5IC2	8340240	**123**	UA 7915/C
		123	LM 3207-15
		123	MC 7915 CT
5IC3	8340212	**105**	MC 78 M5CT
8IC1	8340262	**103**	NE 5532
8IC2			

LIST OF DIODES

209	215	217	218				
							

0D1	8320058	**217**	SFD 184
		215	1N 4148
		209	1N 4148
1D1	8300058	**217**	SFD 184
1D2		**215**	1N 4148
1D3		**209**	1N 4148
1D5			
1D6			
1D7			
1D8			
1D9			
1D10	8300189	**218**	BAV 19
		218	BA 219/TB
1D11	8300058	**217**	SFD 184
		215	1N 4148
		209	1N 4148
1D12	8300201	**209**	ZPD 6.2V5%
		209	BZX 79C6V2
		209	BZX 83C6V2
1DP1	8330028		FCS 8499
1DP2	8330014		FNA 0098
2D1	8300058	**217**	SFD 184
2D2		**215**	1N 4148
2D3		**209**	1N 4148
2D101/201			
2D102/202			

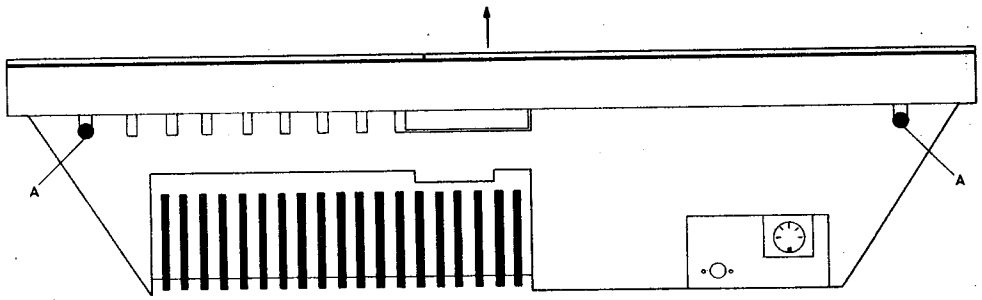
2D103/203			
3D1	8300058	**217**	SFD 184
3D2		**215**	1N 4148
3D3		**209**	1N 4148
3D4	8300189	**218**	BAV 19
		218	B4 219/TB
3D5	8300058	**217**	SFD 184
3D6		**215**	1N 4148
3D7		**209**	1N 41418
3D8			
3D9			
3D11	8300036	**209**	ZPD 4.7V5%
		209	BZX 79C4V7
		209	BZX 83C4V7
3D12	8300058	**217**	SFD 184
3D13		**215**	1N 4148
		209	1N 4148
4D1	8300218	**209**	ZPD 13V5%
		209	BZX 79C 13V0
		209	BZX 83C 13V0
4D2	8300023	**209**	1N 4002/RL
4D3			
4D4	8300058	**217**	SFD 184
		215	1N 4148
		209	1N 4148
4D5	8300135	**209**	ZPD 3.3V5%
4D6		**209**	BZX 79C3V3
		209	BZX 83C3V3

4D7	8300058	**217**	SFD 184
		215	1N 4148
		209	1N 4148
4D8	8300023	**209**	1N 4002/RL
4D9			
4D10			
4D11			
4D12	8300058	**217**	SFD 184
4D13		**215**	1N 4148
		209	1N 4148
4D14	8300023	**209**	1N 4002/RL
4D15	8300058	**217**	SFD 184
4D16		**215**	1N 4148
		209	1N 4148
6D1	8300294	**209**	MR 501
6D2		**209**	IN 5401
6D3			
6D4			
6D5	8300023	**209**	IN 402/RL
6D6			
6D7			
6D8			
6D9			
6D10			
6D11			
6D12			
6D13	8300036	**209**	ZPD 4.7V5%
		209	BZX 79C4V7
		209	BZX 83C4V7
8D101/201	8300058	**217**	SFD 184
8D102/202		**215**	1N 4148
		209	1N 4148

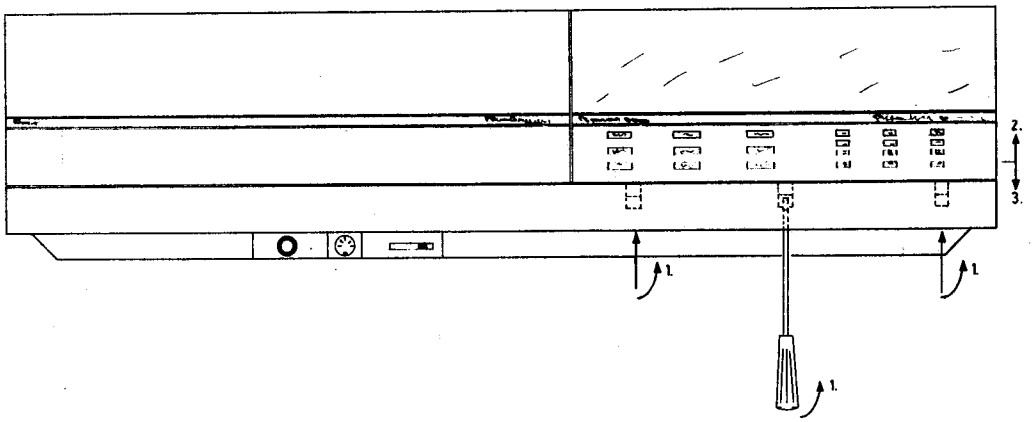
Bang&Olufsen

ADSKILLELSE
DISASSEMBLY

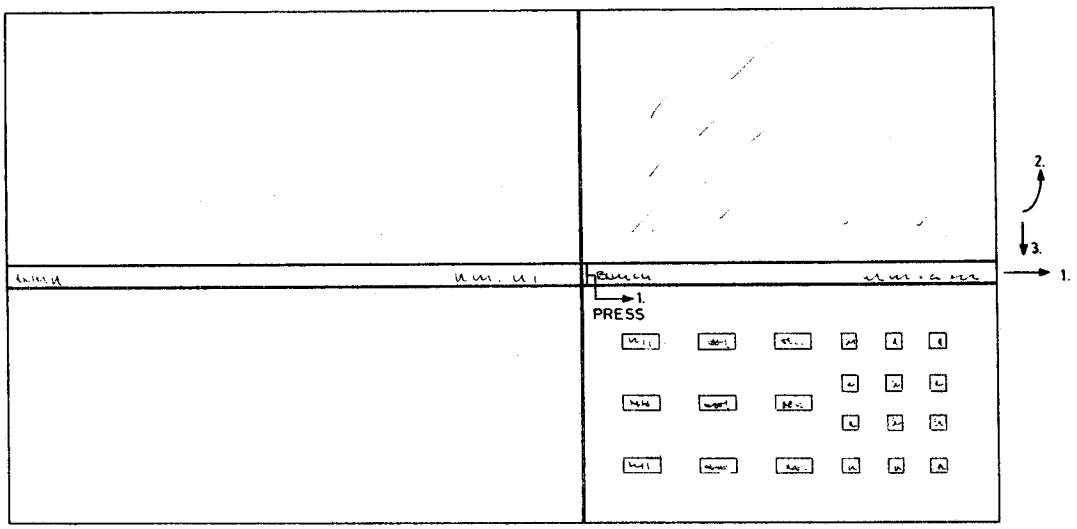
Serviceposition: Skruerne A løsnes
Service position: Loosen screw A



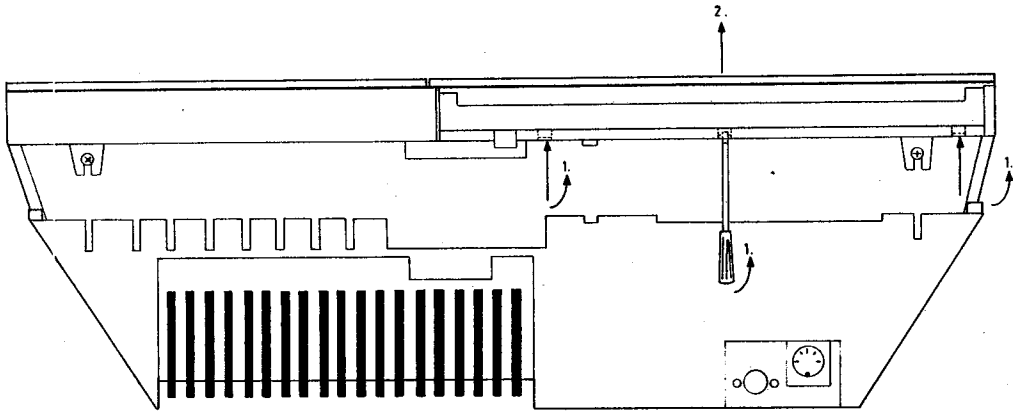
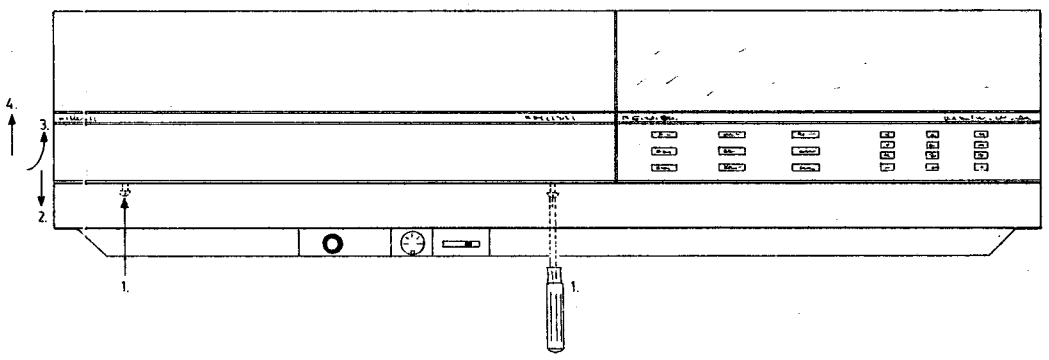
Betjeningspanel
Operating panel



Display dæksel
Cover for display



Toppanel og vippelåg
Cover and panel



Aluminiumsdækplade
Aluminium cover